

REMARKS

Entry of the foregoing amendments, favorable reconsideration, reexamination, and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks.

Entry of Amendments

Applicant respectfully requests entry of the foregoing amendments, by which apparatus Claims 1-9 and 16 have been cancelled to simplify prosecution of this application. Applicant makes this amendment without acquiescing to the rejections thereof, and expressly reserves the right to file one or more continuation applications to further pursue the subject matters of these claims.

Entry of this amendment is appropriate at this time, because: it raises no new issues, and thus raises no issues requiring further search and/or consideration; the cancellation of claims *per se* does not raise any issue of new matter; it cancels more finally rejected claims (10) than it adds (0); and it simplifies issues for allowance (or appeal) by removing claims to one of the two statutory classes of claims previously presented, and correcting a misspelling. See M.P.E.P. § 706.07(f).

Objection to the Specification

At page 2 of the Office Action, the Specification was again objected to because it allegedly contained informalities. More specifically, the description at pages 7-8 was objected to because reference is made to Figs. 4 and 5, while the drawings include Figs. 4a, 4b, 5a, and 5b. Applicant respectfully requests reconsideration of this objection.

By way of the foregoing amendment to the specification, reference to “Fig. 4” has been replaced with “Figs. 4a and 4b”, while reference to “Fig. 5” has been replaced with “Figs. 5a and 5b”. No new matter has been entered.

For at least the foregoing reasons, Applicant respectfully submits that the Specification is not objectionable, and therefore respectfully requests withdrawal of the objection thereto.

Rejections under 35 U.S.C. § 102

In the Office Action, beginning at page 3, Claims 1-17 were rejected under 35 U.S.C. § 102(b), as reciting subject matters that allegedly are anticipated by *Schulte-Werning*; Claims 1-8, 10-12, 14, and 16 were rejected under section 102(b) as reciting subject matters that allegedly are anticipated by *Althaus* '982; and Claims 1-12, 14, and 16 were rejected under section 102(b) as reciting subject matters that allegedly are anticipated by *Althaus* '311. Applicants respectfully request reconsideration of these rejections.

Applicant notes that the Office Action again includes, below each rejection under section 102, the complete text of each of *Schulte-Werning*, *Althaus* '982, and *Althaus* '311, respectively. It is first unclear to Applicant why, especially in light of the verbatim copying of the text of these documents in the first Office Action, the final Office Action again includes this text. Applicant notes the several passages to which emphasis has been added, and finds them as inapplicable to the subject matters of the pending claims as the remainders of the patents. In addition, the Office Action includes a "Response to Arguments" section beginning at page 46, which likely includes the first actual explanation in this record of the bases for the various rejections.

Applicant next notes that Claims 1-9 and 16, the apparatus claims, have been cancelled, narrowing the focus of this application to the subject matters of method Claims 10-15 and 17. Applicant has, both in the instant specification and the Response filed 12 October 2005, described some aspects of the present application and some of their advantages over the prior art, including *Schulte-Werning*, *Althaus* '982, and *Althaus* '311. Thus, Applicant will not burden the record with redundant explanations, and merely incorporates by reference those discussions.

Claim 10 relates to a method for controlling the wake flow of a vortex generator in a flow duct to which a fluid medium is applied, the method having a combination of steps including, *inter alia*, introducing an axial impulse in the zone of the core flow of the forming wake vortices at least approximately in the direction of the main flow.

The prior art, including *Schulte-Werning*, *Althaus* '982, and *Althaus* '311, fails to identically disclose or describe combinations of steps as recited in the pending claims.

Fundamentally, the rejections of the method claims' subject matters fail because none of the prior art describes methods including the application of an axial impulse as recited in the pending claims. Instead, each of *Schulte-Werning*, *Althaus '982*, and *Althaus '311* describe the application of a constant flow into the vortices caused by the vortex generators, which is fundamentally different from an axial impulse. The Office Action tacitly acknowledges this difference where, at page 50, it states: "It is clear that the prior art vortex generators each either produce (as emphasized above) or are most capable of producing countercurrent vortices along the axis of the main flow . . .". The Office Action is plainly incorrect in the assertion that *Schulte-Werning*, *Althaus '982*, and *Althaus '311* disclose an axial impulse - instead, none of them disclose such subject matter.

Despite the lengthy discussion of the law of anticipation under section 102, the Office Action notably fails to include an important facet thereof: the disclosure of a prior device arguably capable of performing a claimed method does not anticipate the method, absent a disclosure of the steps of the method or evidence that the steps are inherent in the use of the device. Yet this is the condition of the method claims: *Schulte-Werning*, *Althaus '982*, and *Althaus '311*'s vortex generators arguably could be used to perform Applicant's claimed method, but there is no recognition of this in the prior art. Furthermore, it is plainly not true that a vortex generator, through which a large secondary flow is constantly injected, as in *Schulte-Werning*, *Althaus '982*, and *Althaus '311*, inherently performs a step of introducing an axial impulse in the zone of the core flow of the forming wake vortices at least approximately in the direction of the main flow. Therefore, the prior art of *Schulte-Werning*, *Althaus '982*, and *Althaus '311* fail to disclose each and every step recited in the combinations of Claims 10-15 and 17, at least because none of these documents actually discloses the claimed combination, and performance of the claimed method is not inherent in the operation of the devices of the prior art.

For at least the foregoing reasons, Applicant respectfully submits that the subject matters of each of Claims 10-15 and 17 are not anticipated by *Schulte-Werning*, *Althaus '982*, or *Althaus '311*, are therefore not unpatentable under 35 U.S.C. § 102(b), and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 102(b).

Rejection under 35 U.S.C. § 103(a)

In the Office Action, beginning at page 45, Claim 9 was rejected under 35 U.S.C. § 103(a), as reciting subject matter that allegedly is obvious, and therefore allegedly unpatentable, over each of the disclosures of *Schulte-Werning*, *Althaus '982*, and *Althaus '311*, each taken alone.

Because Claim 9 has been cancelled without prejudice, this rejection is moot.

Conclusion

Applicant respectfully submits that the present patent application is in condition for allowance. An early indication of the allowability of this patent application is therefore respectfully solicited.

If Mr. Cooley believes that a telephone conference with the undersigned would expedite passage of this patent application to issue, he is invited to call on the number below.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. If, however, additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and the Commissioner is hereby authorized to charge fees necessitated by this paper, and to credit all refunds and overpayments, to our Deposit Account 50-2821.

Respectfully submitted,

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